

IT Curriculum Committee

Agenda Summary

April 21, 2009

Full agenda is on the web site: <http://www.aem.umn.edu/~shield/itcc/>

1. Approval of Jan 27, 2009 meeting Minutes
2. Announcement: Tentative Meeting Schedule for 2009-10
 - 2:30 on Tuesday 2009-9-22
 - 2:30 on Tuesday 2009-12-8
 - 2:30 on Tuesday 2010-1-26
 - 2:30 on Tuesday 2010-4-20
3. Information on Program Changes:
 - a. Computer Engineering Technical Electives change – details are on web site
4. Items for Information only (already approved in ECAS):
 - a. AEM 5401 - Intermediate Dynamics: change grade base remove S-N
 - b. CLE recertification:
 - i. AST 1001 - Exploring the Universe
 - ii. AST 1011H - Exploring the Universe, Honor
 - iii. CHEM 1015 - Introductory Chemistry: Lecture
 - iv. CHEM 1017 - Introductory Chemistry: Lab
 - v. CSCI 1001 - Overview of Computer Science
 - vi. GEO 3002 - Climate Change and Human History
 - vii. IOFT 1101 - Environmental Issues and Solutions
 - viii. PHYS 1101 - 1402 (Freshman Physics courses)
 - ix. PHYS 3071W - Laboratory-Based Physics for Teachers
 - c. Adding Topics:
 - i. AST 1905 - "Cosmic Catastrophes"
 - ii. AST 1905 - "Nothing"
 - iii. CE 5180 - "Design for Sustainable Development"
 - iv. CSCI 2980 - "Art & Science of Information & Data Visualization"
 - v. GEO 1901 – "Geology of Minnesota"
 - vi. GEO 1901 – "Geology and Civilization"
 - vii. GEO 1901 – "Polar Environments"
 - viii. PHYS 1905 - "How Things Work"
 - ix. PHYS 1905 - "THE PHYSICS SUPERHEROES"
 - x. PHYS 1910W - "How Common is Extraterrestrial Life"
 - d. BBE 4401 - Bioproducts Engineering: add discussion section
 - e. BBE 4501 - Process and Product Design I: add lab component
 - f. BBE 5401 - Bioproducts Engineering: add discussion component
 - g. CHEM 1015 - Introductory Chemistry: Lecture: added equiv to CHEM 1011
 - h. CHEM 1017 Introductory Chemistry: Lab: add equiv to CHEM 1011, prereq of &1015
 - i. CHEM 1021 - Chemical Principles I: lecture is now graded component

- j. CHEM 1022 - Chemical Principles II: lecture is now graded component
 - k. CHEM 2121 - Process Analytical Chemistry: removed summer as offered term
 - l. CHEM 3502 - Introduction to Quantum Mechanics and Spectroscopy: added other math classes as equivalent prereqs.
 - m. CHEM 5502 - Introduction to Quantum Mechanics and Spectroscopy: added other math classes as equivalent prereqs.
 - n. EE 4301 - Digital Design With Programmable Logic: VHDL → Verilog in all text
 - o. EE 4701 - Electric Drives: change term to spring
 - p. EE 4721 - Introduction to Power System Analysis: change term to fall
 - q. GEO 3402 - Science and Politics of Global Warming: added equiv to 5402
 - r. ME 3332 - Thermal Sciences II: added equiv to ME 3322 (inactive course)
 - s. ME 3333 - Thermal Sciences III: added equiv to ME 3322 (inactive course)
5. Items for Approval without objection (already approved in ECAS):
- a. AEM 4333 - Aerospace Design Projects: removal of mention of inactive second design course and III designation
 - b. CSCI 5131 - Advanced Internet Programming: add graduate student to prereqs.
 - c. CSCI 5211 - Data Communications and Computer Networks: add graduate student to prereqs
 - d. CSCI 5511 - Artificial Intelligence I: add graduate student to prereqs
 - e. CSCI 5707 - Principles of Database Systems: add graduate student to prereqs
 - f. EE 301 - Introduction to Digital System Design: Discussion: inactive
 - g. EE 361 - Introduction to Microcontrollers: Discussion: inactive
 - h. EE 2301 - Introduction to Digital System Design: integrate 301 lab into this course
 - i. New Course: EE 2302 - Introduction to Digital System Design Laboratory: separate 2301 lab for transfer students
 - j. EE 2361 - Introduction to Microcontrollers: integrate 361 lab into this course
 - k. New Course: EE 2362 - Introduction to Microcontrollers Lab: separate 2361 lab for transfer students
6. Action Items:
- a. New course: AEM 4000H - Honors Research Seminar (see handout)
 - b. New course: AEM 4876 - International Professional Experience (see handout)
 - c. New course: AEM 4894H - Senior Honors Thesis (see handout)
 - d. CE 5551 - Environmental Microbiology Laboratory: separate out lab as new course CE 5552, remove CE 3501 prereq.
 - e. New course: CE 5552 - Environmental Microbiology Laboratory (see handout)
 - f. CHEM 1015/17 - Introductory Chemistry: Lecture/lab: Updating PHYS SCI/L core information for re-certification, including the elimination of the equivalency with the now-deleted CHEM 1011. Also updated the text appearing in Course Pre-reqs for Catalog.
 - g. EE 2361 - Intro Microcontrollers: change prereqs to: 2301, [1301 or CSCI 1113 or CSCI 1901],& 0361 (**NOTE: 0361 is now inactive**)
 - h. New course: EE 4161 - Energy Conversion and Storage (see handout)
 - i. EE 4301 - Digital Design With Programmable Logic: change prereq to 2301, [EE 1301 or CSCI 1113 or CSCI 1901]

- j. New course: EE 5251 - Optimal Filtering & Estimation (see handout)
 - k. EE 5705 - Advanced Electric Drives: Changing Title and Description of Course.
 - l. New Course: EE 5707 - Electric Drives in Renewables and Electric/Hybrid Vehicles Laboratory (see handout)
 - m. EE 5657W - Physical Principles of Thin Film Technology: update description and prereqs
 - n. New Course: GEO 2202 - Earth History (see handout)
 - o. New Course: GEO 4403 - Atmosphere, Oceans, and the Climate System (see handout)
 - p. New Course: GEO 4801 - Geobiology and Astrobiology (see handout)
 - q. New Course: GEO 5402 - Science and Politics of Global Warming (see handout)
7. New Business
8. Adjourn